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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LUK, LAWRENCE W

ART UNIT PAPER NUMBER

2838

DATE MAILED: 08/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/955,101

Applicant(s)

SAKAI ET AL.

Examiner

Lawrence Luk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,11,12 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 2,6,8-10,13-17,21,22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-5, 7, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Letchak et al. (5,661,463).

In regard to claim 1, Letchak et al. discloses the elements as claimed. Specifically, Letchak et al. shows an uninterruptible power supply comprising: a power supply unit for generating DC power at a predetermined voltage from AC power supplied from the outside to supply the DC power to an electronic device (refer to col.13, lines 52-54); and a rechargeable battery unit including rechargeable battery cells for storing the power supplied thereto from said power supply unit for supplying said electronic device with the power stored in said rechargeable battery upon service interruption of said AC power (refer to col.1, lines 59-62), wherein said rechargeable battery unit comprises: a battery state monitoring unit for monitoring a state of said rechargeable battery cells (refer to col.5, lines 55-60); and communicating means for notifying said electronic device of information indicative of the state of said rechargeable battery detected by said battery state monitoring unit (refer to col.1, line 10 to col.2, line 10 and col.7, lines 2-67).

In regard to claim 3, Letchak et al. shows the battery state monitoring unit comprise of functions of detecting a battery voltage, a charge current and/or a battery temperature of said rechargeable battery cells, determining a fully charged state of said rechargeable battery cells

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based on the information detected thereby, and calculating a charge capacity and/or a lifetime of said rechargeable battery cells (refer to col.5, lines 19-39).

In regard to claim 4, Letchak et al. shows the communication means notifies said electronic device of at least one of a battery voltage, a battery temperature, a charge current, a discharge current, a battery capacity, a lifetime, the number of discharges, and a replacement time of said rechargeable battery cells, as said information indicative of the state of said rechargeable battery cells. (refer to col.5, lines 19-39).

In regard to claim 5, Letchak et al. shows the rechargeable battery unit comprise: a charge controller for controlling charging of said rechargeable battery cells in accordance with a battery voltage and/or a battery temperature of said rechargeable battery cells detected by said battery state monitoring unit (refer to col.5, lines 19-60).

In regard to claim 7, Letchak et al. shows the rechargeable battery unit comprises a power supply monitoring unit for monitoring a state of said power supply unit (refer to col.5, lines 55-60).

In regard to claim 11, Letchak et al. shows the power supply unit and/or said rechargeable battery unit comprise an alarm function for detecting an interruption of the AC power supplied from the outside to inform the interrupted AC power (refer to col.5, lines 19-27).

In regard to claim 12, Letchak et al. shows the alarm function includes means for informing the interrupted AC power through a visual display and/or rumbling; and resetting means for stopping said information (refer to col.8, lines 1-2).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Letchak et al. (5,661,463) in combination with Powell et al. (4,719,550).

In regard to claims 18 and 19, Letchak et al. disclose the elements as above, except for a cooling fan incorporated in a housing for cooling down.

Powell et al. shows a cooling fan incorporated in a housing for cooling down (refer to col.12, lines 20-39).

It would have been obvious to person having ordinary skill in the art at the time of the invention made to modify the device of Letchak et al. to include a cooling fan incorporated in a housing for cooling down as taught by Powell et al. for improved controlled cool-down after operation.

In regard to claim 20, Powell et al. shows said rechargeable battery unit comprises a cooling fan for cooling down said rechargeable battery cells, and a fan controller for controlling the operation of said cooling fan (refer to col.12, line 33-39).

Allowable Subject Matter

5. Claims 2,6, 8-10, 13-17, 21 and 22 are objected to as being dependent upon a rejected base claim. The prior art of record fails to teach or reasonably suggest that: Claim 2, the rechargeable battery cells comprise nickel-metal hydride rechargeable batteries; Claims 6, the power supply unit comprises: a first inverter for converting the AC power supplied from the outside to AC power for driving a primary winding of an insulating transformer; a DC voltage stabilizer circuit for retrieving power from a secondary winding of said insulating transformer to generate a predetermined DC stabilized voltage; a charging unit for retrieving power from a tertiary winding of said insulating transformer for use in charging said rechargeable battery cells; and a second inverter for DC/AC converting the power supplied from said rechargeable battery cells for driving said tertiary winding; Claim 8, said rechargeable battery unit comprises performance determining means for determining backup performance of said rechargeable battery cells for said electronic device in accordance with a battery temperature of said rechargeable battery cells and the power consumption by said electronic device, and result outputting means for outputting the result of determination; Claims 9 and 10 are dependent on claim 8. Claim 13, the rechargeable battery unit comprises: charge energy detecting means for detecting a charge energy of said rechargeable battery cells; charging/discharging detecting means for detecting a charging/discharging state of said rechargeable battery cells; failure detecting means for detecting a failure of said rechargeable battery cells and/or said power supply unit; charge energy display means for displaying the charge energy of said rechargeable battery cells detected by said charge energy detecting means in multiple stages; alarming means for informing a failure detected by said failure detecting means. Claims 14-17 are dependent on

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claim13; Claim 21 the fan controller detects the temperature of said rechargeable battery to operate said cooling fan; Claim 22, the fan controller comprises a function for forcedly disabling said cooling fan to operate when said rechargeable battery cells are being charged. Claims 2, 6, 8-12, 13-17, 21 and 22 would be allowable if rewritten in independent from including all of the limitations of the base claim.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Luk whose telephone number is (703)305-0617. The examiner can normally be reached on 7 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (703) 308-1680. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-7724 for regular communications and (703)305-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1782.

LWL
July 24, 2003

Lawrence Luk
examiner
7/24/03